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10/774,494	02/10/2004	Cheol-hong An	Q77657	8908
23373 7590 06/16/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER YUEN, KAN	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/774,494

Applicant(s)

AN, CHEOL-HONG

Examiner

KAN YUEN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments, see remark, filed 4/14/2008, with respect to the rejection(s) of claim(s) 1-29 under 102(e) and 103 rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Katseff et al. (Pub No.: 2001/0009554).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6, 8-10, 13, 15-17, 19-22, 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Katseff et al. (Pub No.: 2001/0009554).

For claim 1, Katseff et al. disclosed the method of an adaptation unit which selectively performs a second transmission mode in which the transmitted data packet is transferred after reconfiguration thereof, according to specific information included in a header of the transmitted data packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3). Client A, C, and E each transmit a stream of digital packets to the protocol converter 48 using TCP format. Each packet transmitted by the clients A, C, and E contains header information in TCP format

which is initially configured. The TCP/UDP protocol header converter 68 removes the TCP header information from the packets, and translates the TCP header to UDP header, and adds the UDP header to the packets, and thus the packets are transmitted after the reconfiguration from TCP to UDP in the header.

Regarding claim 2, Katseff et al. disclosed the method of the adaptation unit selectively performs a second receiving mode in which the received data packet is restored to a data packet state before being subjected to the reconfiguration, when the received data packet is transferred in the second transmission mode (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format.

Regarding claim 3, Katseff et al. disclosed the method of in the second transmission mode, the adaptation unit removes header information of the transmitted data packet to create new packet information and adds additional data thereto (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 69 removes the TCP header and translates the TCP to UDP.

Regarding claim 6, Katseff et al. disclosed the method of the transmitted data packet comprises an IP packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3).

Claim 8 is rejected similar to claim 1.

Regarding claim 9, Katseff et al. disclosed the method of receiving of the data packet including selectively performing one of a first receiving mode in which the data packet is not restored when the data packet is transferred through the first transmission mode and

a second receiving mode in which the data packet is restored to a data packet state before being subjected to reconfiguration when the data packet is transferred through the second transmission mode (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format;

Regarding claim 10, Katseff et al. disclosed the reconfiguration of the data packet comprises removing header information of the data packet to create new packet information and adding additional data thereto (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 69 removes the TCP header and translates the TCP to UDP.

Regarding claim 13, Katseff et al. disclosed the method of the data packet comprises an IP packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3).

Regarding claim 15, Katseff et al. disclosed the method of in the second transmission mode, the adaptation unit removes header information of the transmitted data packet to create new packet information and adds additional data thereto (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 69 removes the TCP header and translates the TCP to UDP.

Regarding claim 16, Katseff et al. disclosed the method of in the second receiving mode, the adaptation unit restores data included in the received data packet to respective data packets before being subjected to reconfiguration (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format.

Regarding claim 17, Katseff et al. disclosed the method of in the second receiving mode, the adaptation unit combines the data of the respective data packets with corresponding header information (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 68 removes the TCP header information, and translates the TCP to UDP header information, and adds or combines the UDP and header to the packets.

Regarding claim 19, Katseff et al. disclosed the method of an adaptation unit which selectively performs a second transmission mode in which the transmitted data packet is transferred after reconfiguration thereof, according to specific information included in a header of the transmitted data packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3). Client A, C, and E each transmit a stream of digital packets to the protocol converter 48 using TCP format. Each packet transmitted by the clients A, C, and E contains header information in TCP format which is initially configured. The TCP/UDP protocol header converter 68 removes the TCP header information from the packets, and translates the TCP header to UDP header, and adds the UDP header to the packets, and thus the packets are transmitted after the reconfiguration from TCP to UDP in the header.

Regarding claim 20, Katseff et al. disclosed the method of the reconfiguration of the data packet comprises removing header information of the data packet to create new packet information and adding additional data thereto (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 69 removes the TCP header and translates the TCP to UDP.

Regarding claim 21, Katseff et al. disclosed the method of a data receiving unit which selectively reconfigures a data packet which was previously configured, to be transferred according to specific information included in a header of the data packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3). Client A, C, and E each transmit a stream of digital packets to the protocol converter 48 using TCP format. Each packet transmitted by the clients A, C, and E contains header information in TCP format which is initially configured. The TCP/UDP protocol header converter 68 removes the TCP header information from the packets, and translates the TCP header to UDP header, and adds the UDP header to the packets, and thus the packets are transmitted after the reconfiguration from TCP to UDP in the header; wherein said at least one of the data transferring unit and the receiving unit reconfigures the data packet by removing header information of the data packet to create new packet information and adding additional data thereto (Katseff et al. paragraphs 0023, fig. 2 and fig. 3). The TCP/UDP protocol header converter 68 removes the TCp header information from the packets, and translates the TCP to UDP header.

Regarding claim 22, Katseff et al. disclosed the method of in response to the data packet received thereto being the reconfigured data packet, said at least one of the transferring unit and the receiving unit restores the reconfigured data packet to an original data packet format (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format.

Regarding claim 25, Katseff et al. disclosed the method of at least one of the data transferring unit and the receiving unit comprises an adaptation layer which selectively reconfigures the data packet to increase a transmission efficiency and restores the reconfigured data packet to an original data packet format (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The TCP/UDP protocol header converter 68 removes the TCP header information from the packets, and translates the TCP to UDP header. Then the UDP/TCP converter converts the UDP back to the TCP format. Wherein the UDP provides fast packet transmission.

Regarding claim 26, Katseff et al. disclosed the method of selectively reconfiguring the data packet according to specific information included in a header of the data packet, before transmitting the data packet (Katseff et al. paragraphs 0023, fig. 2 and fig. 3). Client A, C, and E each transmit a stream of digital packets to the protocol converter 48 using TCP format. Each packet transmitted by the clients A, C, and E contains header information in TCP format which is initially configured. The TCP/UDP protocol header converter 68 removes the TCP header information from the packets, and translates the TCP header to UDP header, and adds the UDP header to the packets, and thus the packets are transmitted after the reconfiguration from TCP to UDP in the header; restoring the data packet to a data packet state before being subjected to the reconfiguration, if the received data packet has been reconfigured (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format.

Regarding claim 27, Katseff et al. disclosed the method of the reconfiguration of the data packet comprises removing header information of the data packet to create new packet information and adding additional data thereto (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 69 removes the TCP header and translates the TCP to UDP.

Regarding claim 28, Katseff et al. disclosed the method of the restoring of the data packet comprises restoring data included in the received data packet to respective data packets before being subjected to reconfiguration (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The UDP/TCP converter converts the UDP packet back to TCP format.

Regarding claim 29, Katseff et al. disclosed the method of the restoring of the data packet further comprises combining data of the respective data packets with corresponding header information (Katseff et al. paragraphs 0023-0024, fig. 2 and fig. 3). The converter 68 removes the TCP header information, and translates the TCP to UDP header information, and adds or combines the UDP and header to the packets.

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 5, 7, 11, 12, 14, 18, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katseff et al. (Pub No.: 2001/0009554) in view of See et al. (Pub No.: 2006/0143300).

For claim 4, Katseff et al. silent on the method of the new packet information comprises a destination service access point (DSAP), a total length of IP(Internet Protocol), a number of IP headers, UDP(User Datagram Protocol) checksums, and a number of UDP checksums. See et al. from the same or similar fields of endeavor teaches the method of the new packet information comprises a destination service access point (DSAP), a total length of IP(Internet Protocol), a number of IP headers, UDP(User Datagram Protocol) checksums, and a number of UDP checksums (See et al. paragraph 0065). Although Tang et al. did not disclose all the limitation of claim 4, however it is obvious to the person of ordinary skill in the art to add additional information to the packet. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by See et al. in the network of Katseff

et al. The motivation for using the method as taught by See et al. in the network of Katseff et al. being that it provides reliability in packet transmission system.

Regarding claim 5, See et al. disclosed the method of the new packet information comprises four bits of the number of UDP checksums, two bytes of the total length of IP, and two bytes of the UDP checksums (See et al. paragraph 0065). The number of bits is the design choice, which is obvious to a person of ordinary skill in the art.

Regarding claim 7, See et al. disclosed the method of the specific information comprises a field of Type of Service included in the header of the transmitted data packet (See et al. paragraph 0065).

Regarding claim 11, See et al. disclosed the method of the new packet information comprises a destination service access point (DSAP), a total length of IP, a number of IP headers, UDP checksums, and a number of UDP checksums (See et al. paragraph 0065). Although Tang et al. did not disclose all the limitation of the claim, however it is obvious to the person of ordinary skill in the art to add additional information to the packet.

Regarding claim 12, See et al. disclosed the method of the new packet information comprises four bits of the number of UDP checksums, two bytes of the total length of EP, and two bytes of the UDP checksums (See et al. paragraph 0065). The number of bits is the design choice, which is obvious to a person of ordinary skill in the art.

Regarding claim 14, See et al. disclosed the method of the specific information comprises a field of Type of Service included in the header of the data packet (See et al. paragraph 0065).

Regarding claim 18, See et al. disclosed the method of the new packet information comprises six bytes (See et al. paragraph 0065). The number of bits is the design choice, which is obvious to a person of ordinary skill in the art.

Regarding claim 23, See et al. disclosed the method of the new packet information includes a destination service access point (DSAP), a total length of IP, a number of IP headers, user datagram protocol (UDP) checksums, and a number of UDP checksums (See et al. paragraph 0065). Although Tang et al. did not disclosed all the limitation of claim 3, however it is obvious to the person of ordinary skill in the art to add additional information to the packet.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katseff et al. (Pub No.: 2001/0009554) in view of Mascolo (Pub No.: 2002/0085587).

For claim 24, Katseff et al. and Mascolo both silent on the method of the data packet comprises audio/video (A/V) streaming data. Mascolo from the same or similar fields of endeavor teaches the method of the data packet comprises audio/video (A/V) streaming data (Mascolo paragraph 0073). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Mascolo in the network of Katseff et al.

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and See et al. The motivation for using the method as taught by Mascolo in the network of Katseff et al. and See et al. being that it provides adaptability in the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2616

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